2/1/24 LAB-4 AREAS OF TRIANGLE, RECTANGLE AND CIRCLE

```
import java.util.Scanner;
abstract class shape {
    protected int sidea;
    protected int sideb;
public shape (int sidea, int sideb
    this.sidea = sidea;
    this.sideb = sideb;
    }
} public abstract void printArea();

class Rectangle extends shape {
    public Rectangle (int length, int width
    super (length, width);
}
    public void printArea() {
    int area = sidea * sideb;
    System.out.println(" Area of Rectangle:
                                    area);
}}
class Triangle extends shape {
    public Triangle (int base, int heigh
    super (base, height);
    }
    public void printArea() {
    double area = 0.5 * sidea * sideb;
    System.out.println(" Area of Triangle
                                    +area);
}}
class Circle extends shape {
    public Circle (int radius) {
    super (radius, 0); }
```

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```
class circle {  public void printArea() {
double area = MATH.PI * side a * side b;
System.out.println("Area of Circle:"
                    + area);
}}
public class shapes {
public static void main(String[] args) {
Scanner scanner = new Scanner(System
                                .in);
System.out.println("Enter length & width
                        of Rectangle:");
int rectlength = scanner.nextInt();
int rectwidth = scanner.nextInt();
Triangle triangle = new Rectangle(rectlength
                                rect width);
System.out.println("Enter b & h for tri");
int tribase = scanner.nextInt();
int rectwidth = scanner.nextInt();
Triangle triangle = new Triangle(tribase,
                                triHeight);
System.out.print("Enter radius:");
int circleRadius = scanner.nextInt();
Circle circle = new circle(circleRadius);
scanner.close();
rectangle.printArea();
triangle.printArea();
circle.printArea();
}
}
```

Output:

Enter length & breadth for rectangle: 2
3
Enter base and height for Triangle: 5
4

Enter radius for circle: 9
Area of Rectangle: 6
Area of Triangle: 10.0
Area of Circle: 0.0

check it

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